PRELIMINARY PROGRAM

FRIDAY, 20 APRIL 2012

1530-1830 Pre-conference Tutorial

The Fragmented QRS
Organizers: Kjell Nikus, Tampere University Hospital, Tampere FINLAND
Fabio Badilini, AMPS-LLC, Montichiari ITALY

Kjell Nikus, Tampere University Hospital, Tampere FINLAND
Overview

Mithilesh K. Das, Krannert Institute of Cardiology Indianapolis IN USA
The Fragmented QRS: a novel marker of cardiac disease?

Michael Ringborn, Thoracic Center, Blekingesjukhuset, Karlskrona, Sweden and Lund University, Lund, Sweden
The anatomical/electrophysiologic background

Robert Lux, University of Utah, Salt Lake City UT USA
Measurement aspects

SATURDAY, 21 APRIL 2012

Welcome & Opening Remarks
Fabio Badilini, AMPS-LLC, Montichiari ITALY

Session I: Papers from submitted abstracts
Chair: Kjell Nikus, Tampere University Hospital, Tampere FINLAND
Co-chair: TBA
Kjell Nikus, Tampere University Hospital, Tampere FINLAND
Overview

Vincent Jacquemet, Hôpital du Sacré-Coeur de Montréal, Montréal CANADA
Assessment of the sensitivity of drug-induced QTc changes using subject-specific rate correction
Discussion
Georg Schmidt, Technische Universität München, München GERMANY
Bivariate phase-rectified signal averaging for assessment of respiratory sinus arrhythmia: A novel predictor of late mortality after myocardial infarction

Discussion
Deodato Assanelli, University of Brescia, Brescia ITALY
T-wave axis deviation, metabolic syndrome and estimated cardiovascular risk in the MOLI-SANI project

Discussion
Salman J. Bandeali, Baylor College of Medicine, Houston TX USA
Comparison of segmental wall motion abnormalities on echocardiography in patients with anteroseptal versus extensive anterior wall ST segment elevation myocardial infarction

Discussion

**Break**

**Session II: Drug-induced changes of cardiac repolarization**
Chair: Marek Malik, University of London, London ENGLAND
Co-chair: Christine Garnett, USFDA, Silver Spring MD USA

Marek Malik, University of London, London ENGLAND
Overview
Norman Stockbridge, USFDA Silver Spring MD USA
Present challenges and so far unresolved problems

Discussion
Christine Garnett, USFDA, Silver Spring MD USA
PK/PD modeling of QTc drug influences

Discussion
Johanne Zhang, USFDA, Silver Spring MD USA
Statistical issues of TQT studies and baseline correction

Discussion
Marek Malik, University of London, London ENGLAND
Stability of QT measurement and/or QTc assessment

Discussion

**Poster Session 1**

**PRESENTERS:** [not yet assigned to specific day]
Roger Abächerli, Schiller AG, Baar SWITZERLAND
ST-segment deviation score in the early diagnosis of acute myocardial infarction

Roger Abächerli, Schiller AG, Baar SWITZERLAND
ST-segment deviation score in the risk prediction of patients with suspected acute myocardial infarction

Saeed Babaeizadeh, Philips Healthcare, Andover MA USA
A comparison of three ECG-derived respiration techniques during cardiac magnetic resonance image acquisition

Raymond Bond, University of Ulster, Newtownabbey NORTHERN IRELAND
Assessing perception of new methods that represent ST deviation
W. Brian Chiu, Dynacardia, Inc., Azusa CA USA  
_Spectral analysis of the resting ECG for the classification of stress-induced myocardial ischemia by vascular territory_

W. Brian Chiu, Dynacardia, Inc., Azusa CA USA  
_Spectral analysis of JTp segment for the classification of Type-2 diabetes_

Jean-Philippe Couderc, University of Rochester, Rochester NY USA  
_Immediate response of QT to RR changes identifies an impairment of repolarization adaptation to heart rate in the LQT-1 syndrome_

Rebecca Di Maio, HeartSine Technologies Ltd., Belfast NORTHERN IRELAND  
_Does re-fibrillation occur in models with impedances greater than 94 ohms? Assessing the impact on first shock success of varying patient impedances_

Rebecca Di Maio, HeartSine Technologies Ltd., Belfast NORTHERN IRELAND  
_Retrospective analysis of first shock efficacy in human cardiac arrest patients using 100 joules biphasic versus 150 joules biphasic_

Loriano Galeotti, USFDA, Silver Spring MD USA  
_Evaluating strict and conventional left bundle branch block criteria using ECG simulations_

Daniel Guldenring, University of Ulster, Newtownabbey NORTHERN IRELAND  
_Estimation accuracy of a reduced lead system during continuous ST monitoring_

Eric Helfenbein, Philips Healthcare, Andover MA USA  
_ECG/EMG-derived respiration during cardiac magnetic resonance imaging_

Timothy Huang, Johns Hopkins University, Baltimore MD USA  
_Reproducibility of automated electrocardiographic measurements_

Robert J. Knotts, Baylor College of Medicine, Houston TX USA  
_Diffuse ST depression with ST elevation in AVR: Is this pattern specific for global ischemia due to left main coronary artery disease?_

Oded Luria, Biological Signal Processing Ltd., Tel-Aviv ISRAEL  
_Ischemia monitoring using high-frequency QRS analysis_

David Pickham, UCSF, San Francisco CA USA  
_Multiple RR averaging decreases variability in QT interval correction with atrial fibrillation_

Roberto Sassi, Università degli Studi di Milano, Crema ITALY  
_T-wave alternans: lessons learned from a biophysical ECG model_

Autumn Schumacher, Georgia Health Sciences University, Augusta GA USA  
_Age-related changes in QRS and QTc interval times observed in isolated rabbit hearts after induction of ventricular fibrillation and spontaneous conversion to sinus rhythm_

Sanjoli Sur, Johns Hopkins University, Baltimore MD  
_Intracardiac native QTST integral decreases immediately prior to spontaneous sustained ventricular tachyarrhythmia, but not before supraventricular arrhythmia in patients with implantable cardioverter-defibrillators_

Larisa Tereshchenko, Johns Hopkins University, Baltimore MD USA  
_Prediction of ventricular tachyarrhythmia by intracardiac QTST integral_

Martino Vaglio, AMPS-LLC, New York City NY USA  
_C-reactive protein level is linked to T-wave axis deviation in a healthy Italian population: results from the MOLI-SANI project_
New 3D patient-specific morphing tool translates ECG/VCG waveforms into cardiac MRI and CT anatomy

ECG evidence of prior myocardial infarction improves the diagnostic performance of tests for left ventricular systolic dysfunction

Subdivision of heart rate variability VLF band contains prognostic value of all-cause mortality after acute myocardial infarction

SESSION III: Patient monitoring alarm fatigue, management and solutions

Chair: Barbara J. Drew, UCSF, San Francisco CA USA
Co-chair: Shawn Forrest, USFDA Silver Spring MD USA

Barbara J. Drew, UCSF, San Francisco CA USA
Overview
James P. Keller, ECRI Institute, Plymouth Meeting PA USA
What is the problem and why is it #1 on ECRI’s priority list for 2012?
Discussion
Frank E. Block, Jr., Little Rock AR USA
Why we don’t have, and won’t have, smarter alarms
Discussion

Break

Maria Cvach, Johns Hopkins Hospital, Baltimore MD USA
New approaches and best practices for alarm management
Discussion
Gari D. Clifford, University of Oxford, Oxford ENGLAND
How can alarms be smarter to improve specificity?
Discussion
Shawn Forrest, USFDA, Silver Spring MD USA
The FDA perspective
Discussion

Poster Session 1 – Continuing Discussions

SUNDAY, 22 APRIL 2012

Session IV Changing role of ECG in left ventricular hypertrophy diagnosis

Chair: Ljuba Bacharova, University of Bratislava, Bratislava SLOVAK REPUBLIC
Co-chair: David Strauss, USFDA, Silver Spring MD USA
Ljuba Bacharova, University of Bratislava, Bratislava SLOVAK REPUBLIC
Overview
E. Harvey Estes, Duke University Medical Center, Durham NC USA
ECG manifestations of left ventricular electrical remodeling
Discussion
Giuseppe Schillaci, University of Perugia, Perugia ITALY
Electrocardiography vs. echocardiography in the assessment of LVH: Weighing the evidence

Discussion
Joseph A. Hill, University of Texas Southwestern Medical Center, Dallas TX USA
Structure, functional and metabolic remodeling of myocardium in LVH

Discussion

Break

Ljuba Bacharova, University of Bratislava, Bratislava SLOVAK REPUBLIC
Computer simulation of the ECG manifestations of left ventricular electrical remodeling

Discussion
David Strauss, USFDA, Silver Spring MD USA
Differentiation between LBBB and LVH as decision support for resynchronization therapy

Discussion

Poster Session 2
PRESENTERS:
[SEE POSTER SESSION 1]

Kenichi Harumi Plenary Address

Peter Macfarlane
University of Glasgow, Royal Infirmary, Glasgow SCOTLAND

Why, in 2012, C.A.R.E. should be more sexy and racy, yet suitable for all ages!

Session V: Jos Willems Young Investigators Competition
Chair: Konrad Brockmeier, University of Köln, Köln GERMANY
Co-chair: Shen Luo, MindRay Biomedical, Mahwah NJ USA
Konrad Brockmeier, University of Köln, Köln GERMANY
Overview
Kathleen McDowell, Johns Hopkins University, Baltimore MD USA
Investigating the arrythmogenic effects of atrial fibrosis in patient-specific models

Discussion
Javed Nasir, San Antonio Military Medical Center, San Antonio TX USA
The effect of body mass index on surface electrocardiograms from young adults

Discussion
Durgesh Das, Johns Hopkins University, Baltimore MD USA
Larger degree of QT prolongation after spontaneous ventricular premature beat is associated with ventricular tachyarrhythmia in patients with structural heart

Discussion
Loek Meijs, Catharina Hospital, Eindhoven NL
Increased T amplitude with decreased ST elevation characterizes ischemic preconditioning: A simulation, experimental and clinical study
Poster Session 2 – Continuing Discussions

MONDAY, 23 APRIL 2012

Session VI High-definition electrocardiology from surface to implantable cardiac devices
Chair: Martin Burke, University of Chicago, Chicago IL USA
Co-chair: Igor Efimov, Washington University, St. Louis MO USA

Martin Burke, University of Chicago, Chicago IL USA
Overview

Igor Efimov, Washington University, St. Louis MO USA
Using high definition ECG in implantable cardiac devices

Discussion

Martin Burke, University of Chicago, Chicago IL USA
ICD sensing algorithms: Challenges with the subcutaneous electrogram

Discussion

Raymond Ideker, University of AL, Birmingham AL USA
Different types of long duration ventricular fibrillation: Can they be identified by electrocardiography?

Discussion

BREAK

Neeraj Varma, Cleveland Clinic, Cleveland OH USA
Alternative site pacing: Accessing normal precordial activation: Is it possible?

Discussion

Shen Luo, MindRay, Mahwah NH USA
The bi-ventricular pacemaker body surface ECG study

Discussion

Arthur J. Moss, University of Rochester, Rochester NY USA
Selection of high-risk patients for device intervention with the new advances in technology

Discussion

Session VII: Databases from the world with digital ECGs
Chair: Arthur J. Moss, University of Rochester, Rochester NY USA
Co-chair: TBA

Arthur J. Moss, University of Rochester, Rochester NY USA
Overview

Jared Magnani, Boston University School of Medicine, Boston MA USA
The Framingham Heart Study Digital ECG Repository

Discussion

Jean Philippe Couderc, University of Rochester, Rochester NY USA
The Telemetric and Holter ECG Warehouse (THEW): The first three years of development and research

Discussion

Licia Jacoviello, Laboratory of Genetic and Environmental Epidemiology, Campobasso ITALY
The Moli-Sani project
Discussion
Paul Kligfield, Weill Medical College of Cornell University, New York NY USA

*The FDA warehouse experience with CRSC*

Discussion

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**Banquet**
- Poster Awards
- JWYI Awards
- President’s Remarks
- Chair’s Remarks